ABSTRACT

A capacitance detecting proximity sensor forms a proximity detection range in a spatially open region, avoids the affects resulting from peripheral objects outside the detection target, and enables proximity detection with few malfunctions. The proximity sensor includes: a first detection electrode 11 and a second detection electrode 12 that are disposed to have a predetermined range difference h with respect to a detection direction Y in which a detection subject 20 comes into proximity to the proximity sensor and are independent from a ground potential GND; and a proximity detection circuit 30 that outputs, as a proximity detection output, the difference between a capacitance to ground Ca formed by the first detection electrode 11 and a capacitance to ground Cb formed by the second detection electrode 12.